

REMARKS

Claims 7-21 are currently pending in the above-referenced Application, with claims 1-6 standing withdrawn by the Examiner following the Election/Restriction Requirement mailed September 25, 2003.

The Applicant wishes to express his appreciation for the Examiner's indication that claims 9-10, 12-13 and 20 contain patentable subject matter. For the reasons set forth below, the Applicant believe the claims from which claims 9-10, 12-13 and 20 depend are patentable over the cited references. The Applicant therefore respectfully declines the invitation to place claims 9-10, 12-13 and 20 into independent form at this time.

Claims 7-8, 11, 14-19 and 21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 4,351,540 to Minnebraker ("Minnebraker") in view of U.S. Patent No. 6,142, 201 to Harms ("Harms").

The Claims Are Patentable Over Minnebraker and Harms.

The Applicant respectfully traverses the rejection under § 103(a) of claims 7-8, 11, 14-19 and 21 on the grounds that Minnebraker and Harms, either alone or in combination, fail to teach or suggest the invention recited in independent claims 7 and 14.

As recited in claims 7 and 14, the present invention comprises a wheelchair tire with an asymmetric running profile, wherein the running profile is "configured to be smooth so as to limit chafing of a wheel chair occupant's hands when manually rotating a wheel with said tire mounted thereon." As a result of the limitation that the running profile be smooth in order to protect the occupant's hands, the profile cannot have any projections or ridge-like features

on the outside of the tire, *i.e.*, the profile must necessarily be arranged with the raised portion of the asymmetric profile toward the inside of tire.

The Minnebraker and Harms references do not suggest the present invention. For its part, Minnebraker teaches a wheelchair, but offers nothing else relevant to the present invention. The only discussion of tires in this reference is a passing acknowledgment of their presence: “Suitably mounted on the rim 138 is a tire, which is preferably a rubber tire 142.” Minnebraker at 10:47-50. Minnebraker thus does not provide any suggestion of the present invention’s asymmetric running profile which protects an occupant’s hands.

The Harms reference is cited as teaching a tire “which is asymmetrically disposed with respect to the tire carcass center plane ...” January 13, 2004 at 3. Review of this reference, however, reveals that Harms teaches a tire for a “dune buggy” vehicle which is both broad (to minimize the tendency of the tire to sink into sand) and equipped with a shoulder or ridge (“radial face surface 30”) on the *outside* of the tire. This outer vertical surface “provides a rudder-like effect helping to steer the sand car through turns” while simultaneously minimizing the amount of sand thrown by the tire toward the vehicle and its occupants. Harms at 2:12-17.

The Applicant respectfully submits that one of ordinary skill in the art would not have discerned any suggestion for the present invention from Minnebraker and/or Harms. As noted above, Minnebraker simply contains no teaching or suggestion regarding tires, let alone its combination with other references to obtain the present invention. Nor is there any suggestion for

Harms' combination with Minnibraker. Harms is non-analogous art -- one seeking to address *wheelchair* hand injuries from prior art bicycle-type tall, thin tires would not have considered looking at wide, heavy car tires designed to improve motor vehicle steering in sand dunes. Consistent with Harms being non-analogous, there is not so much as a hint in this reference that its car tire steering ridge be could or should combined with a wheelchair tire.

Moreover, there would be no other motivation to combine these references as, Harms teaches *away* from the present invention. Harms teaches that its sand tire should have a steering ridge arranged facing *outwards* from the vehicle, *i.e.*, outside the tire center plane and facing away from the sand buggy's occupants. Harms Fig. 3, and at 2:3-5 ("... the tires are mounted on the sand car with the offset lug surface directed toward and located closer to the outside of the vehicle"). Such an arrangement would not only fail to protect a wheelchair occupant's hands, it likely would *cause* injury -- Harms teaches placing a steering ridge directly in a location where a wheelchair occupant's hand would be abraded by the ridge. Further, application of Harms' teachings to a wheelchair tire would add insult to injury, as Harms goes on to suggest that raised lettering may be placed on the *outside* of its sand car tire -- right where an occupant's hands would be abraded. Harms at 3:28-30 (Decorative designs or informational material may be molded on the outwardly directed sidewall as indicated at 40.").

The Minnebraker and Harms references thus do not suggest the present invention's arrangement of an asymmetric profile that provides a smooth outer profile "*configured ... so as to limit chafing of a wheel chair occupant's hands*

when manually rotating a wheel with said tire mounted thereon."

In view of Minnebraker's complete absence of teachings on tires, and Harms' teachings away from the present invention's smooth asymmetric running profile which "limit[s] chafing of a wheel chair occupant's hands," the Applicant respectfully submits that one of ordinary skill in the art would not have found a suggestion for the present invention in either Minnebraker or Harms. Because these references, either alone or in combination, fail to teach or suggest the invention recited in independent claims 7 and 14 (and their respective dependent claims), reconsideration and withdrawal of the pending § 103(a) rejection of claims 7-8, 11, 14-19 and 21 is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicant respectfully submits that claims 7-21 are patentable over the cited references and are in form for allowance. Early and favorable consideration and issuance of a Notice of Allowance for claims 7-21 is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit

Account No. 05-1323 (Docket #1891.50917US).

April 13, 2004

Respectfully submitted,



Donald D. Evenson
Registration No. 26,160
Mark H. Neblett
Registration No. 42,028

CROWELL & MORING, LLP
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844